THE CLAIMS

Claims 18-21, 25 and 33-41 are pending in the instant application. Claims 3 and 22-24 have been previously cancelled, and claims 1-2, 4-17, 26-32 and 42-49 have been withdrawn. Claims 18, 33, 36 and 39 are independent. Claims 19-21, 25, 34-35, 37-38 and 40-41 depend directly or indirectly from independent claims 18, 33, 36 and 39, respectively.

Listing of claims:

1. (Withdrawn) A communication system, comprising:

a first tier comprising a first server, the first server comprising a first single integrated convergent network controller chip;

a second tier coupled to the first tier via a single fabric coupled to a single connector, the second tier comprising a second server, the second server comprising a second single integrated convergent network controller chip; and

a third tier coupled to the second tier via the single fabric coupled to the single connector, the third tier comprising a third server, the third server comprising a third single integrated convergent network controller chip,

wherein the first server, the second server and the third server process, respectively via the first single integrated convergent network controller chip, the second single integrated convergent network controller chip and the third single integrated convergent network controller chip, a plurality of different traffic types concurrently over the single fabric that is coupled to the single connector.

2. (Withdrawn) The communication system according to claim 1, wherein the first server processes via the first single integrated convergent network controller chip, at least network traffic and direct attached storage (DAS) traffic over the single fabric.

3. (Cancelled)

4. (Withdrawn) The communication system according to claim 1, wherein the second server processes via the second single integrated convergent network controller chip at least two of network traffic, storage traffic, interprocess communication (IPC) traffic, and cluster traffic over the single fabric.

5. (Withdrawn) The communication system according to claim 1, wherein the second single integrated convergent network controller chip of the second server processes at least two of network traffic, storage traffic, interprocess communication (IPC) traffic, and cluster traffic over the single fabric.

6. (Withdrawn) The communication system according to claim 5, wherein the storage traffic comprises traffic from a redundant-array-of-independent-disks (RAID) configuration or traffic from storage devices accessible via a network over the single fabric.

7. (Withdrawn) The communication system according to claim 1, wherein the second tier comprises an application tier.

8. (Withdrawn) The communication system according to claim 1, wherein the third server processes via the third single integrated convergent

network controller chip at least two of network traffic, storage traffic, interprocess communication (IPC) traffic, and cluster traffic over the single fabric.

9. (Withdrawn) The communication system according to claim 1, wherein the third single integrated convergent network controller chip of the third server processes at least two of network traffic, storage traffic, interprocess communication (IPC) traffic, and cluster traffic over the single fabric.

10. (Withdrawn) The communication system according to claim 1, wherein the single fabric operates utilizing an OSI layer 2 (L2) protocol.

11. (Withdrawn) The communication system according to claim 1, wherein the single fabric operates utilizing an Ethernet protocol.

12. (Withdrawn) The communication system according to claim 1, wherein the single fabric operates utilizing an OSI transport layer and/or network layer protocol.

13. (Withdrawn) The communication system according to claim 12, wherein the OSI transport layer and/or network layer protocol comprises transmission control protocol/Internet protocol (TCP/IP).

14. (Withdrawn) The communication system according to claim 1, wherein one or more of the first server, the second server and/or the third server uses an Internet small computer system interface (iSCSI) protocol in communicating with a storage device over the single fabric.

15. (Withdrawn) The communication system according to claim 14, wherein the iSCSI protocol runs on top of TCP/IP.

16. (Withdrawn) The communication system according to claim 14, wherein the iSCSI protocol runs on top of remote direct memory access protocol (RDMAP).

17. (Withdrawn) The communication system according to claim 1, wherein one or more of the first server, the second server and/or the third server uses an RDMAP to process interprocess communication.

18. (Previously Presented) A network communication system, comprising:

a single integrated convergent network controller chip; and

a single Ethernet connector for handling a plurality of different types of network traffic transported via a single fabric, wherein:

the single Ethernet connector is coupled to the single integrated convergent network controller chip;

the single fabric is coupled to a plurality of servers;

the single integrated convergent network controller chip is operable to concurrently process the plurality of different types of network traffic[[,]] for the plurality of servers, which is transported via the single fabric.

19. (Previously Presented) The network communication system according to claim 18, wherein:

the plurality of servers comprises a blade server, and

the single integrated convergent network controller chip is part of a blade mounted in the blade server.

20. (Previously Presented) The network communication system according to claim 19, wherein the blade server has a single Internet protocol (IP) address.

21. (Previously Presented) The network communication system according to claim 18, wherein the plurality of servers is part of a data center, and the data center comprises a plurality of other servers coupled to each other via the single fabric.

22. (Cancelled)

23. (Cancelled)

24. (Cancelled)

25. (Previously Presented) The network communication system according to claim 18, wherein the plurality of different types of traffic comprises at least two of network traffic, storage traffic, interprocess communication (IPC) traffic and cluster traffic.

26. (Withdrawn) A method for communication, the method comprising:

routing a plurality of different types of traffic for a plurality of servers via a single fabric comprising a single OSI layer 2 (L2) connector, wherein each of said plurality of servers comprises a single integrated convergent network controller chip; and

concurrently processing the plurality of different types of traffic for the plurality of servers, which is routed via the single fabric and the single L2

connector, utilizing the single integrated convergent network controller chip within the plurality of servers.

27. (Withdrawn) The method according to claim 26, wherein the single fabric comprises an Ethernet-based fabric.

28. (Withdrawn) The method according to claim 26, wherein the single fabric comprises an OSI transport layer protocol and/or network layer protocol-based fabric.

29. (Withdrawn) The method according to claim 26, comprising accessing a storage device via the single fabric and the single L2 connector.

30. (Withdrawn) The method according to claim 26, comprising accessing a cluster via the single fabric and the single L2 connector.

31. (Withdrawn) The method according to claim 26, comprising accessing a network via the single fabric and the single L2 connector.

32. (Withdrawn) The method according to claim 26, comprising processing the plurality of different types of traffic via a single integrated convergent network controller chip coupled to the single fabric and an Ethernet connector of the plurality of servers.

33. (Previously Presented) A method for communication, the method comprising:

in a data center:

accessing a storage system over a single fabric, wherein said single fabric comprises a single layer 2 (L2) connector coupled to a single integrated convergent network controller chip that is enabled to concurrently process a plurality of different types of traffic; and

accessing one or more of a cluster and a network over said single fabric.

34. (Previously Presented) The method according to claim 33, wherein said accessing of said storage system, over said single fabric are performed over a single Ethernet connector of a server in the data center.

35. (Previously Presented) The method according to claim 33, wherein said single integrated convergent network controller chip coupled to the single Ethernet connector has a single Internet protocol (IP) address.

36. (Previously Presented) A system for communication, the system comprising:

a single integrated convergent network controller chip that enables concurrent hardware, firmware and software processing functionalities of a plurality of different types of traffic that are received via a single layer 2 (L2) connector that is communicatively coupled to a plurality of servers via a single fabric.

37. (Previously Presented) The system of claim 36, wherein said single integrated convergent network controller chip comprises a layer 2 network interface card (L2 NIC), a transmission control protocol (TCP) processor, an iSCSI processor, a remote direct memory access (RDMA) processor and a Management Agent processor.

38. (Previously Presented) The system of claim 36, wherein said plurality of different types of network traffic comprises at least two of a network traffic, storage traffic, interprocess communication (IPC) traffic and cluster traffic.

39. (Previously Presented) A method for communication, the method comprising:

concurrently providing, via a single integrated convergent network controller chip, hardware, firmware and software processing functionalities of a plurality of different types of traffic that are received via a single layer 2 (L2) connector that is communicatively coupled to a plurality of servers via a single fabric.

40. (Previously Presented) The method of claim 39, wherein said single integrated convergent network controller chip comprises a layer 2 network interface card (L2 NIC), a transmission control protocol (TCP) processor, an iSCSI processor, a remote direct memory access (RDMA) processor and a Management Agent processor.

41. (Previously Presented) The method of claim 39, wherein said plurality of different types of network traffic comprises at least two of a network traffic, storage traffic, interprocess communication (IPC) traffic and cluster traffic.

42. (Withdrawn) The communication system according to claim 1, wherein said single integrated convergent network controller chip comprises a single PHY coupled between said single Ethernet connector and said single MAC for handling said plurality of different types of network traffic for said integrated chip.

43. (Withdrawn) The communication system according to claim 1, wherein said single integrated convergent network controller chip comprises a single frame parser for identifying each of said plurality of different types of network traffic.

44. (Withdrawn) The communication system according to claim 43, wherein said frame parser parses incoming frames of said plurality of different types of network traffic into respective headers and data packets for subsequent data processing by the single integrated convergent network controller chip.

45. (Withdrawn) The communication system according to claim 1, wherein said single fabric comprises a single backplane for transporting said plurality of different types of network traffic to the plurality of servers.

46. (Withdrawn) The method according to claim 26, wherein said single integrated convergent network controller chip comprises a single PHY coupled between said single Ethernet connector and said single MAC for handling said plurality of different types of network traffic for said integrated chip.

47. (Withdrawn) The method according to claim 26, wherein said single integrated convergent network controller chip comprises a single frame parser for identifying each of said plurality of different types of network traffic.

48. (Withdrawn) The method according to claim 47, wherein said frame parser parses incoming frames of said plurality of different types of network traffic into respective headers and data packets for subsequent data processing by the single integrated convergent network controller chip.

49. (Withdrawn) The method according to claim 26, wherein said single fabric comprises a single backplane for transporting said plurality of different types of network traffic to the plurality of servers.